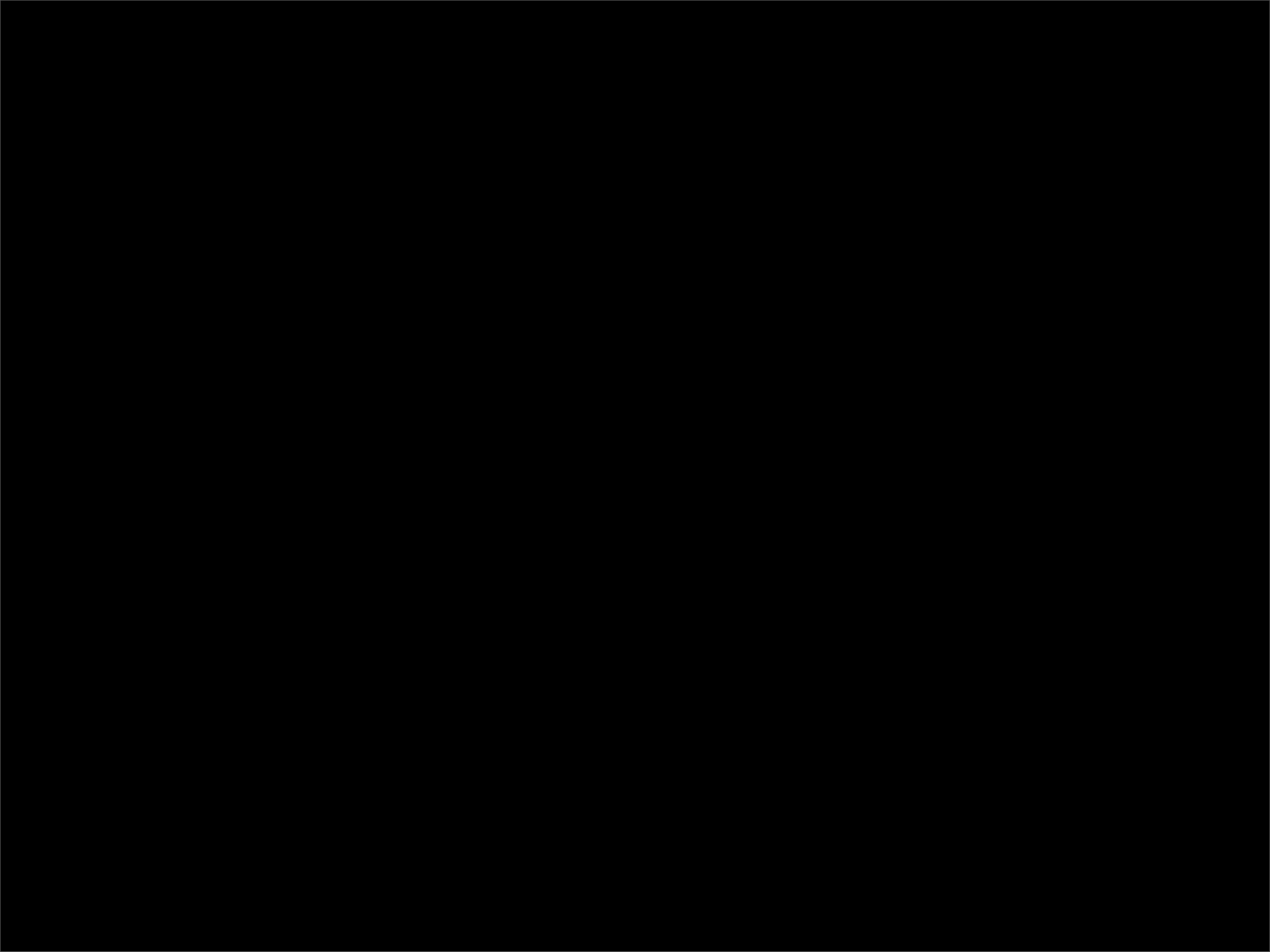


# Visualization

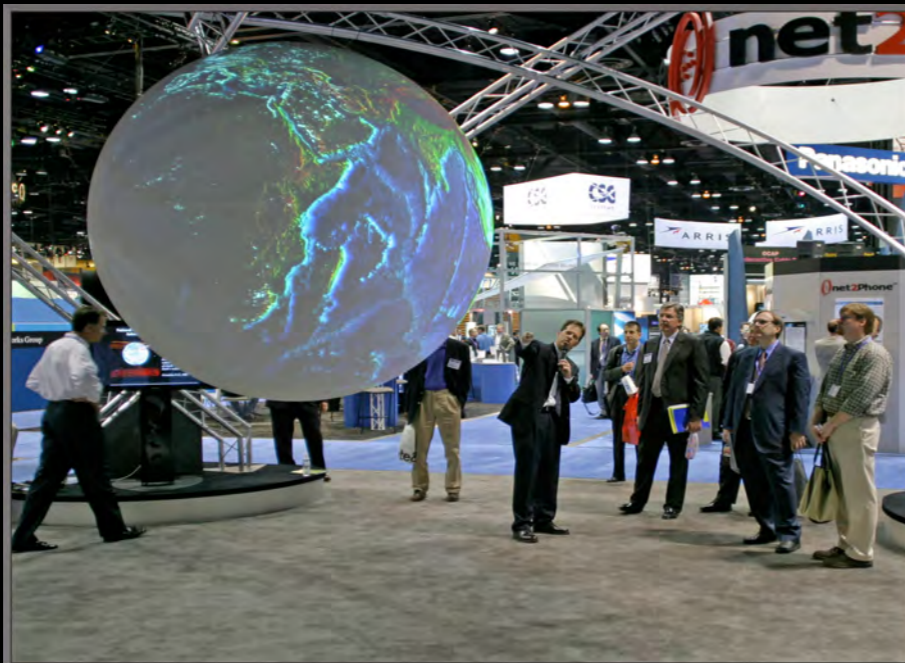
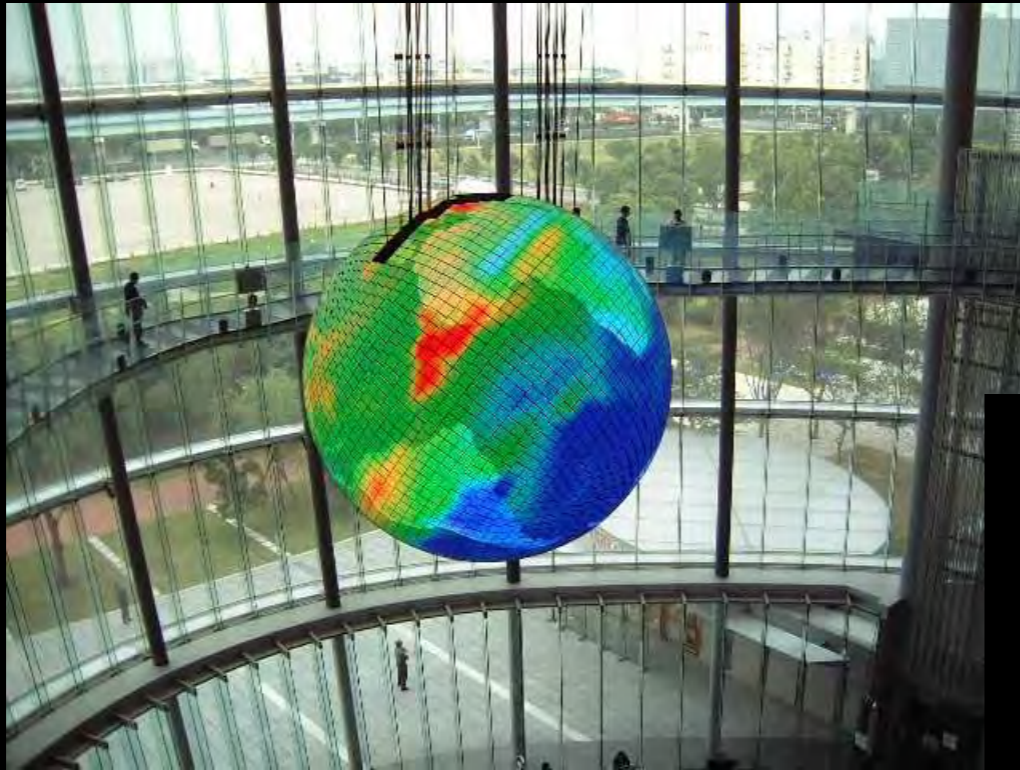
A Climate Service



4. Platforms
3. Producers
2. Principles
1. People

# Platforms

# (Agnostic)



# Producers

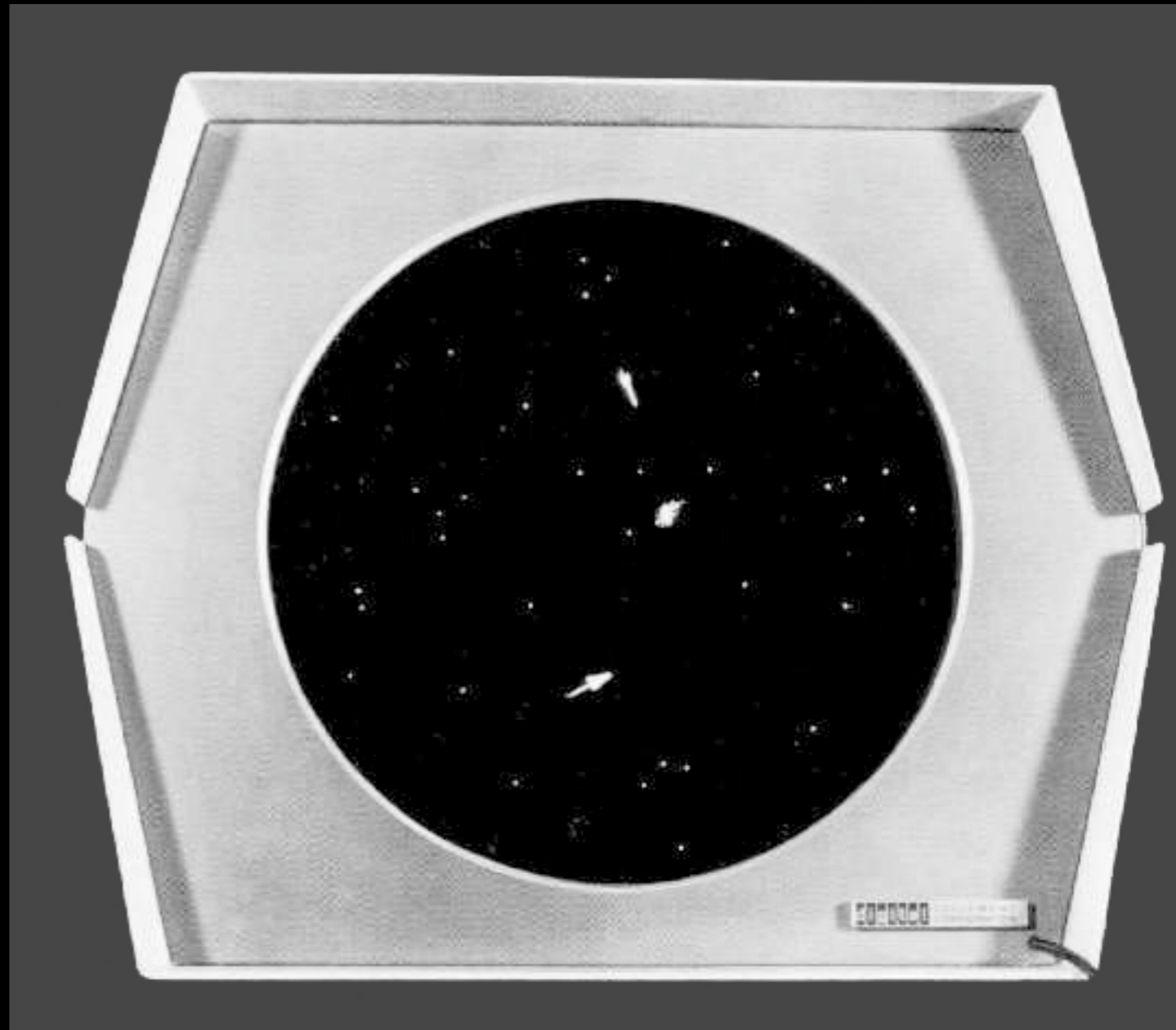
(you)

# Principles



# Computer Graphics

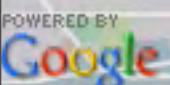
SpaceWar!  
Slug Russell, Shag Graetz, & Alan Kotok  
MIT, 1962



Slide Credit: Rob Simmon

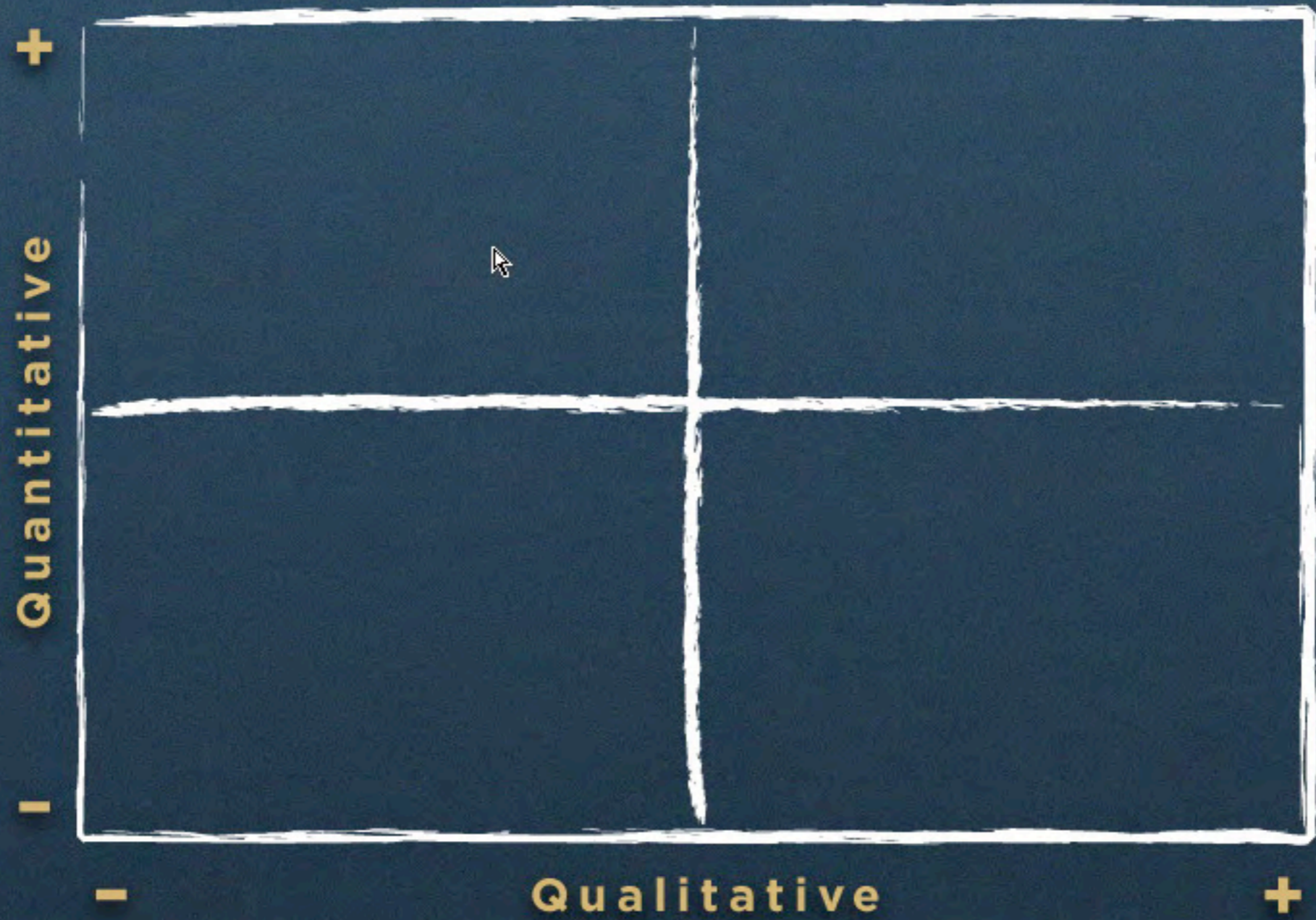


Slide Credit:  
Bruce Daniel

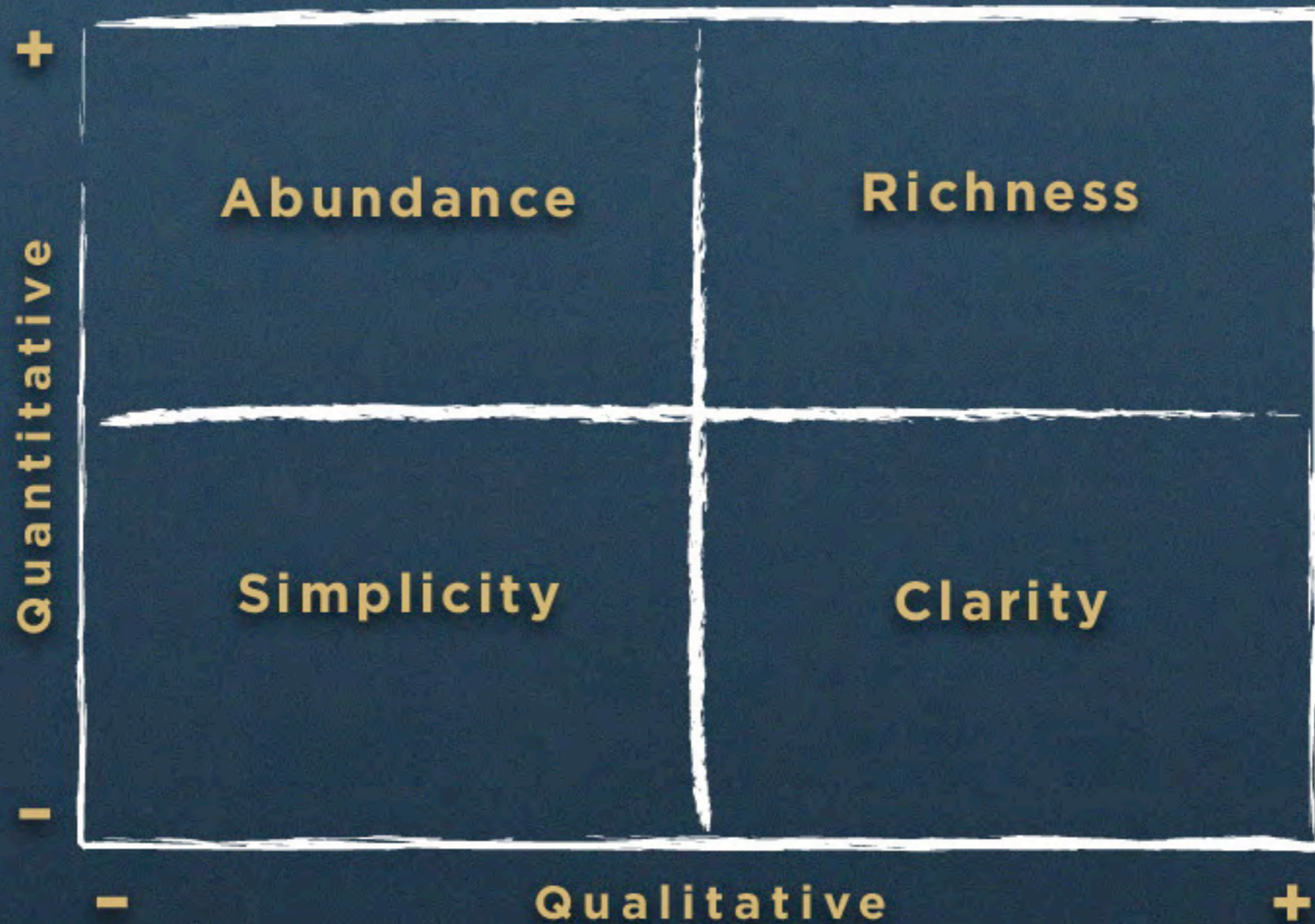


Coming Soon...

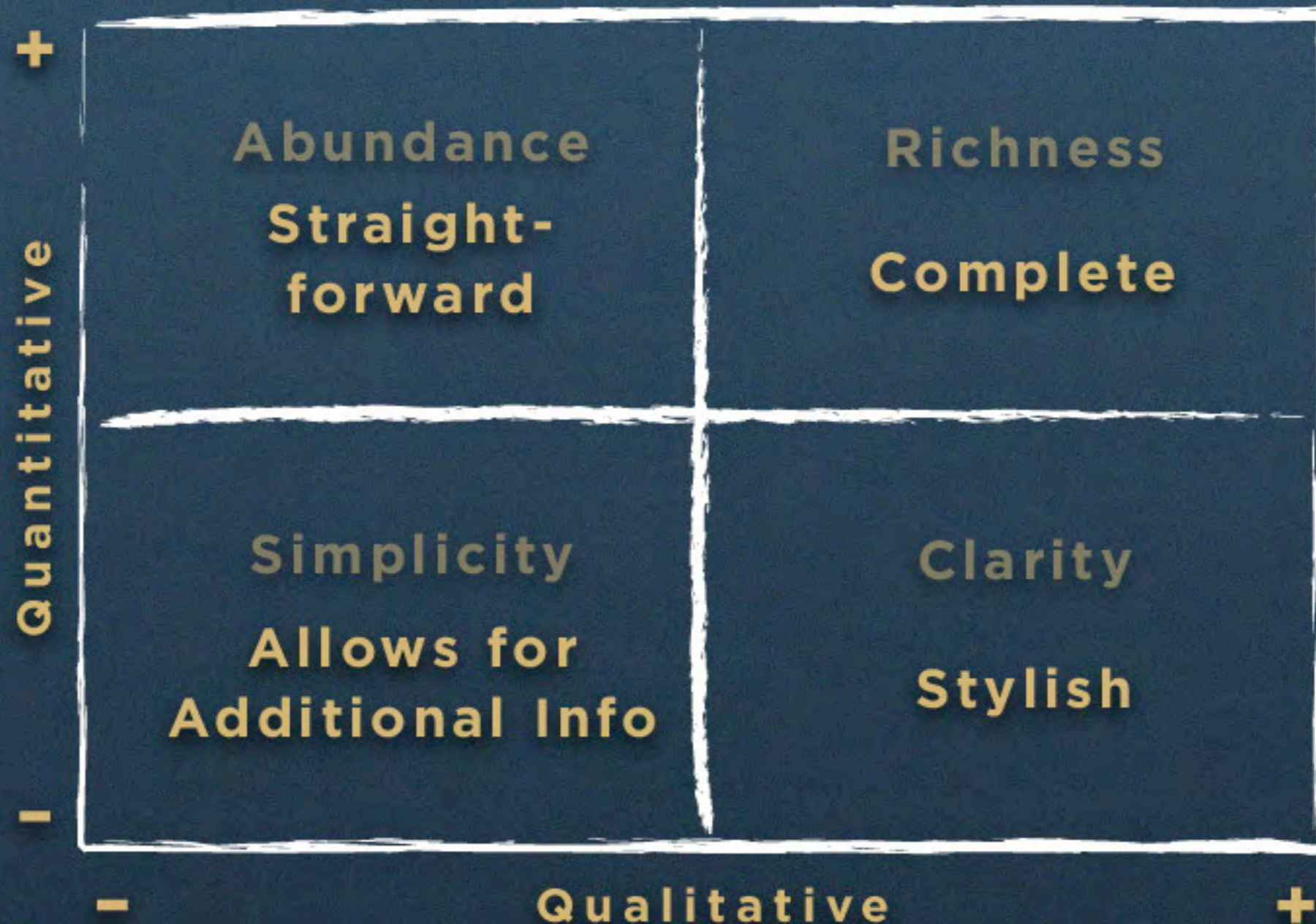
# Visual Style Guide



Slide Credit: Bruce Daniel



Slide Credit: Bruce Daniel



Slide Credit: Bruce Daniel

**Color**

**Texture**

**Luminosity**

**Lighting**

**Transparency**

**Line Weight/Quality**

**Density**

**Edge Treatment**

**Drop Shadow**

**Aerial Imagery Channels**

**Typography**

font

weight

size

tracking

leading

color

case

halo

**Iconography/Symbols**

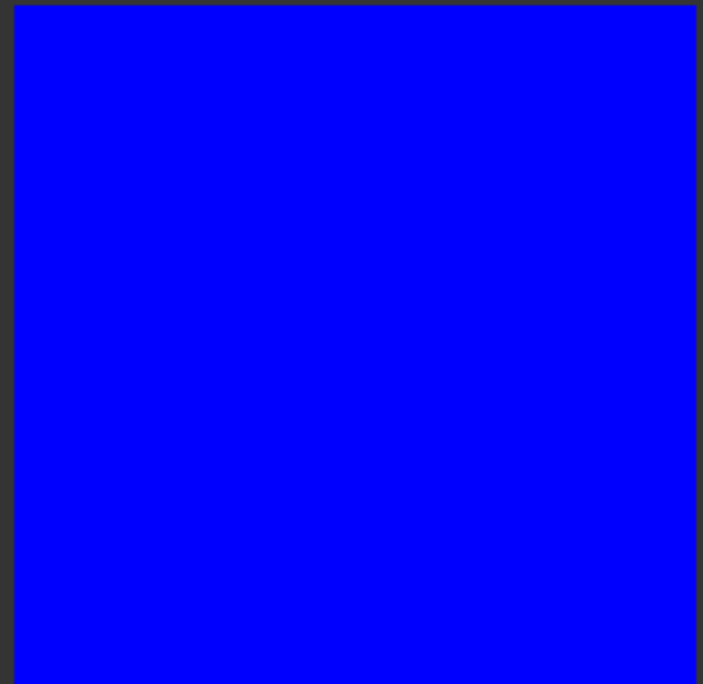
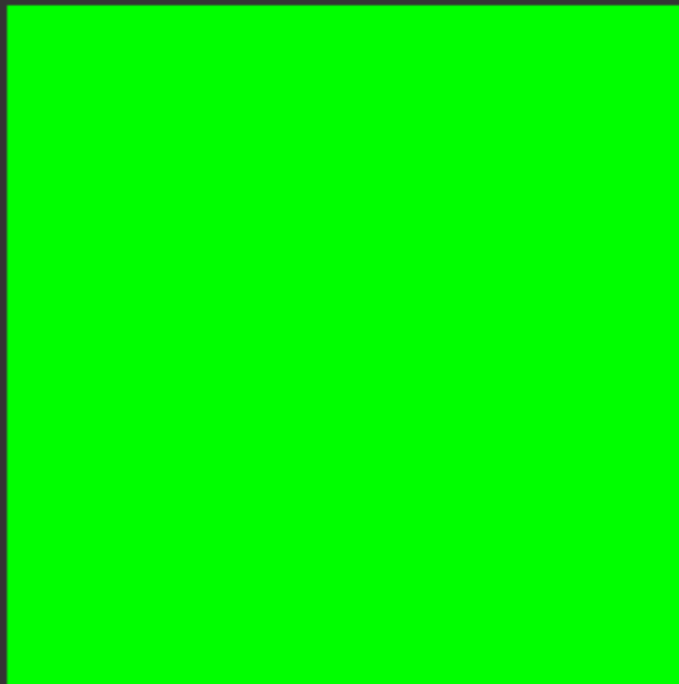
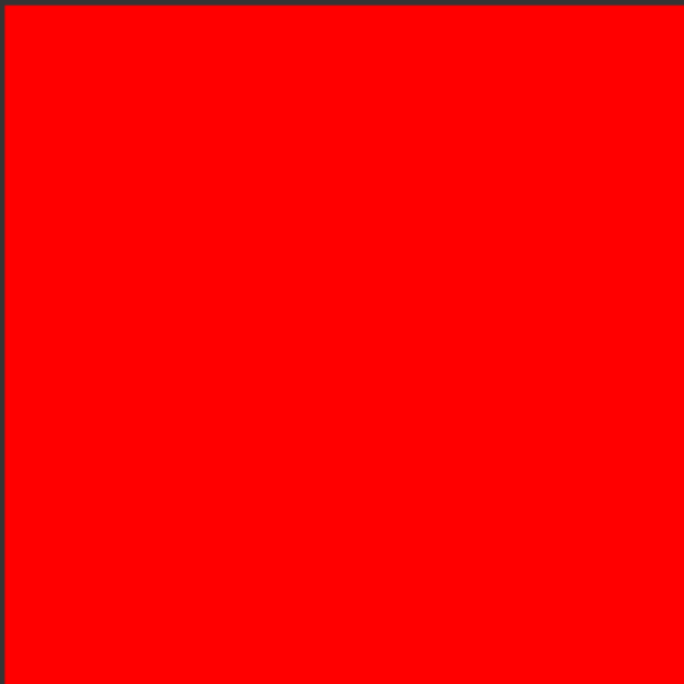
**Motion/Transitions**

**Dimensionality**

# The Rainbow Palette

256 Reasons why you shouldn't use it

# Color



Computer colors:  
Red, Green, Blue; 0–255

Slide Credit: Rob Simmon

# Color



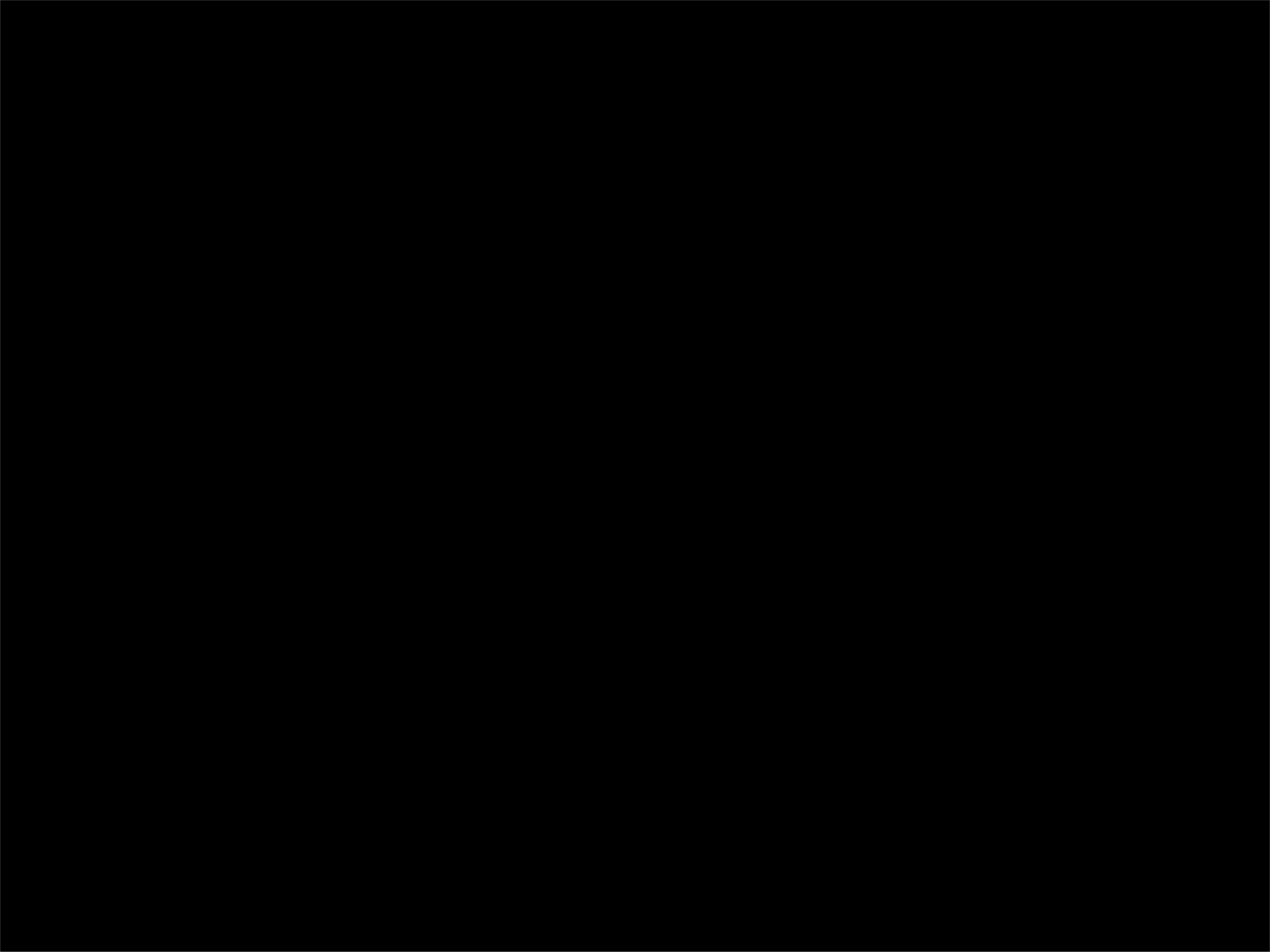
How humans see color: Chroma, Saturation, Lightness  
To accurately represent color, palettes must account  
for human perception.

Slide Credit: Rob Simmon

# Perceptual Palettes



Slide Credit: Rob Simmon



# People

# An Academic Perspective





Monday, June 8, 2009



Monday, June 8, 2009





Monday, June 8, 2009



Monday, June 8, 2009



# Glaciers

- Climate Change
  - Water Supply
  - Adaptation
- Global Change
  - Human Needs
  - Biodiversity



# People *respond to*

- Beauty
- Adventure
- Passion



# RIVERS IN DEMAND

EXPLORATORY KAYAKING THROUGH BIODIVERSITY HOTSPOTS



[Save the Wild Rogue »](#)

[The Salween and the Mountains of Southwest China »](#)

[The Pandi and the East Melanesian Island »](#)

[About](#)

[Crew](#)

[Biodiversity Hotspots](#)



[Take Action!](#)

[Expeditions](#)

[Store](#)

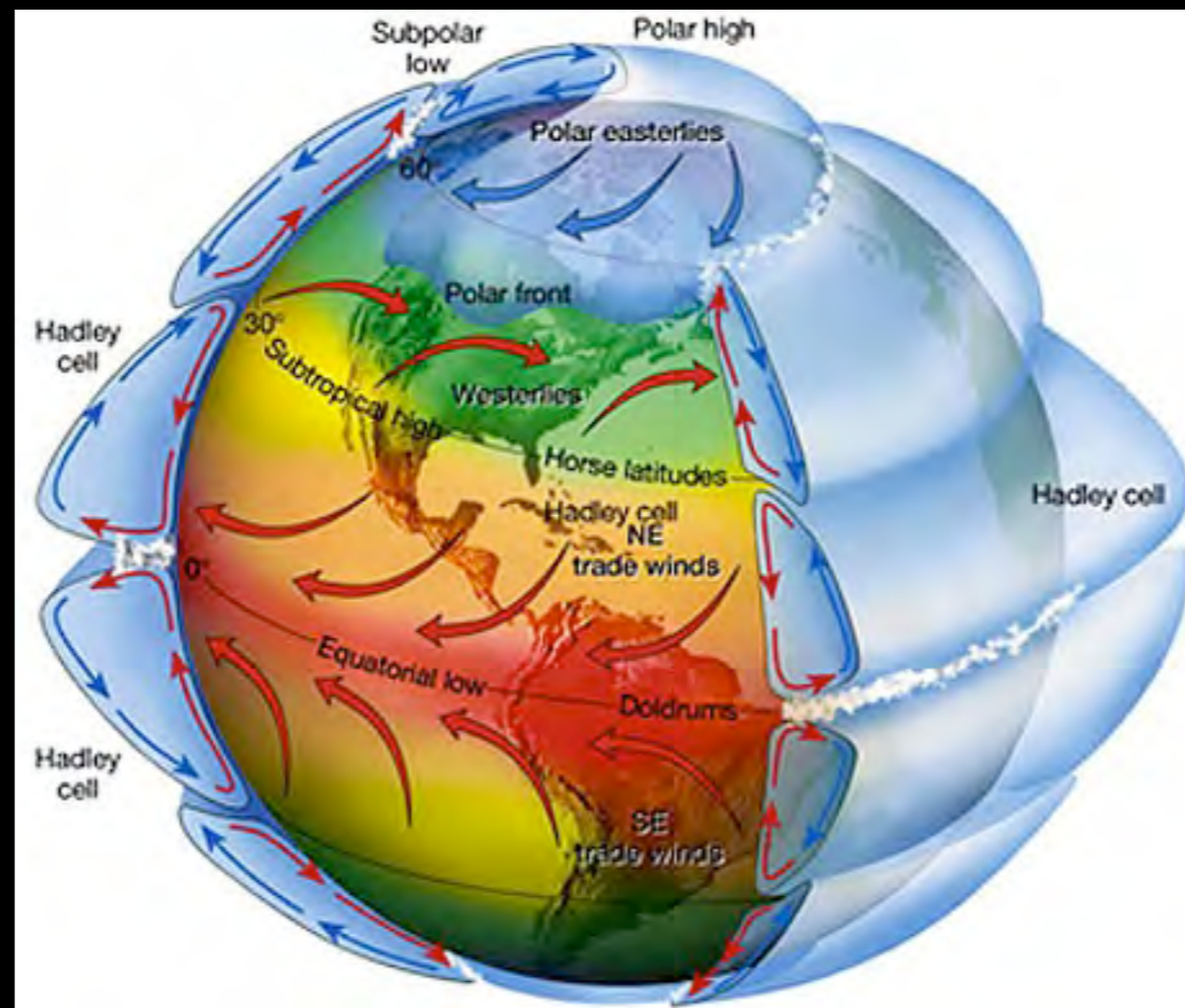
[Contact](#)

# People

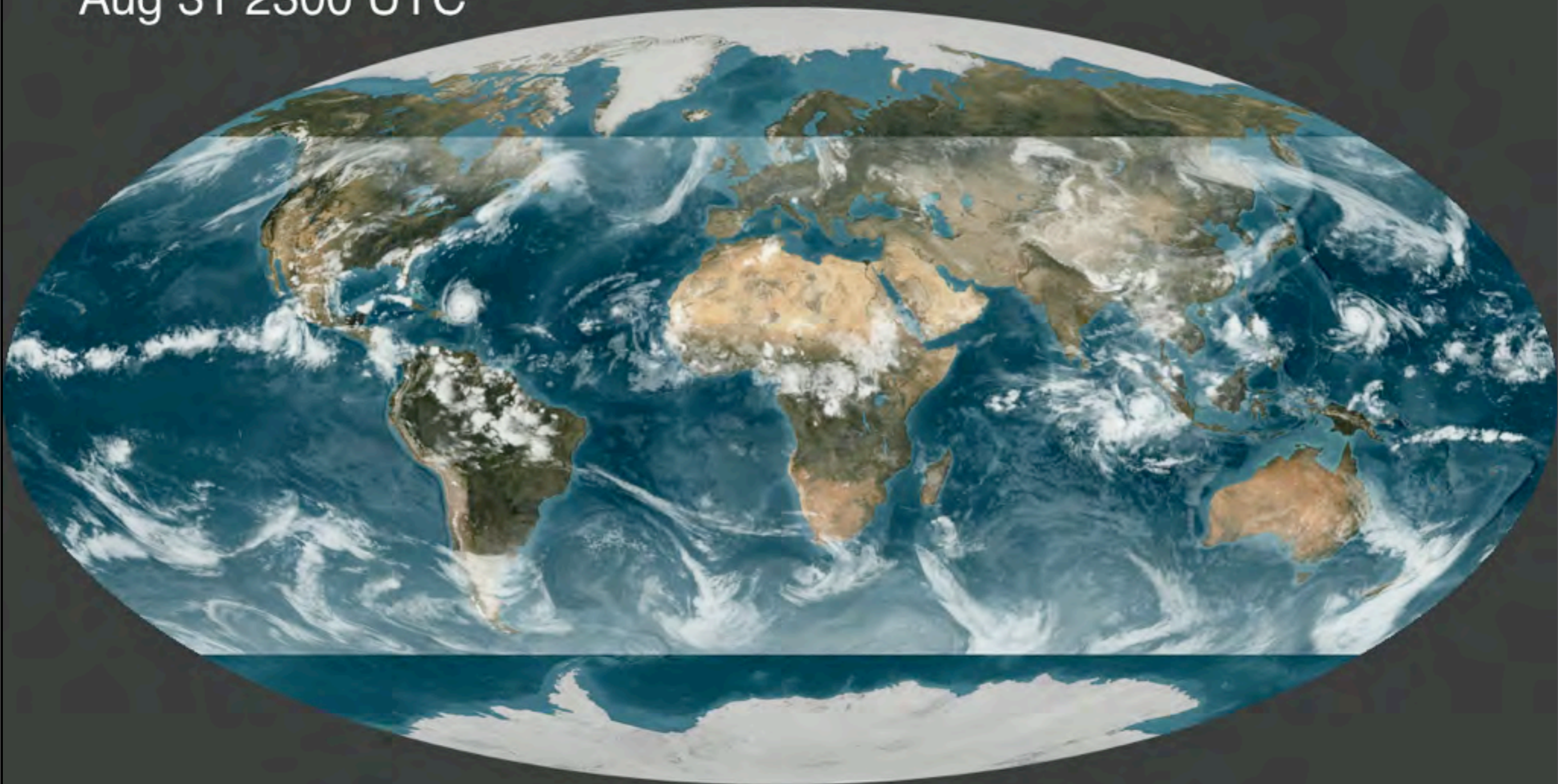
# Regional Perspectives

# Climate and Arizona's Water

# Climate and Circulation



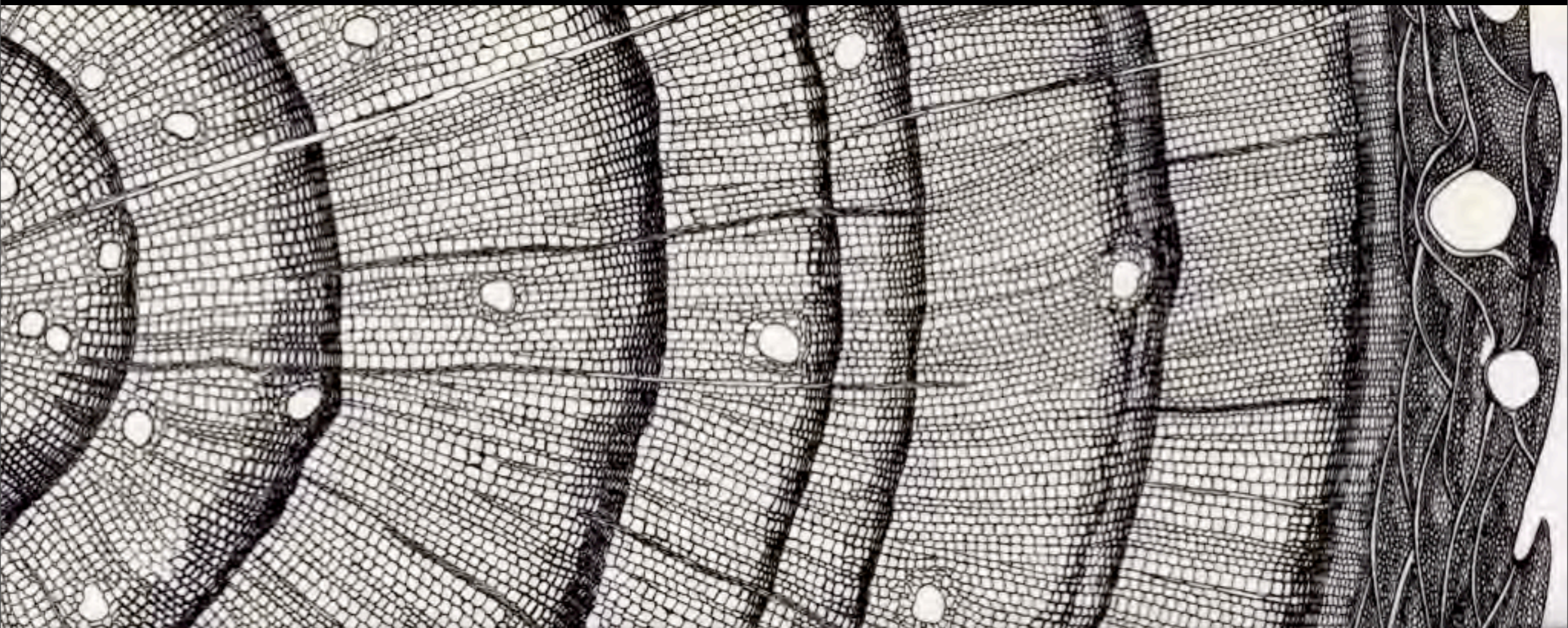
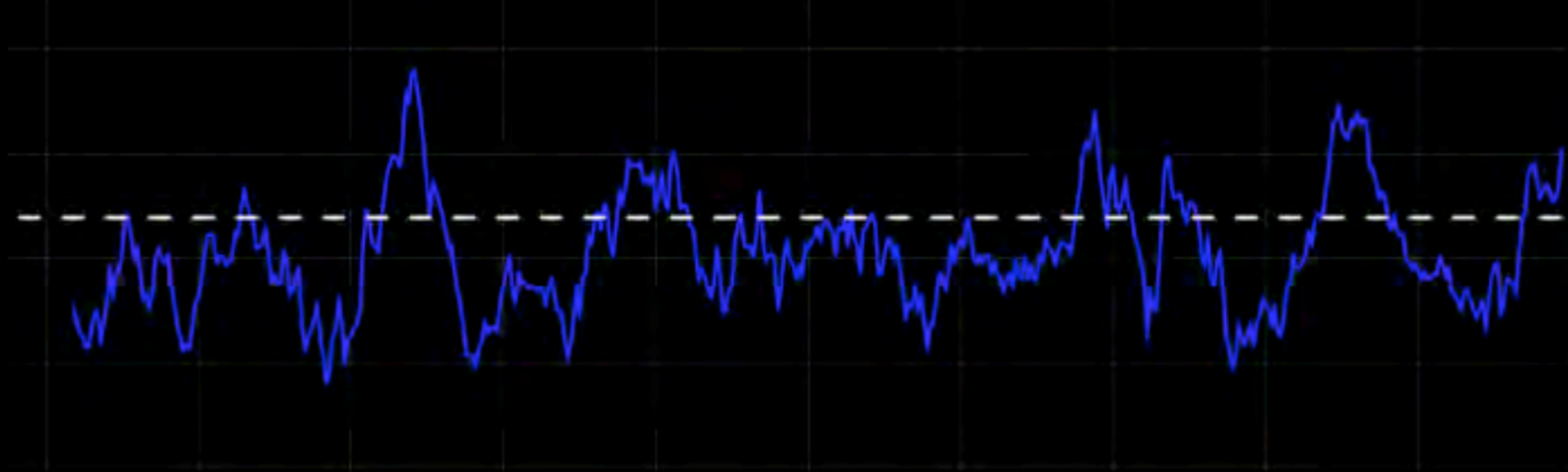
Aug 31 2300 UTC



# Regional Water Supply

- Surface Water
- Ground Water

# Dendrochronology, Discharge, and Groundwater





Monday, June 8, 2009



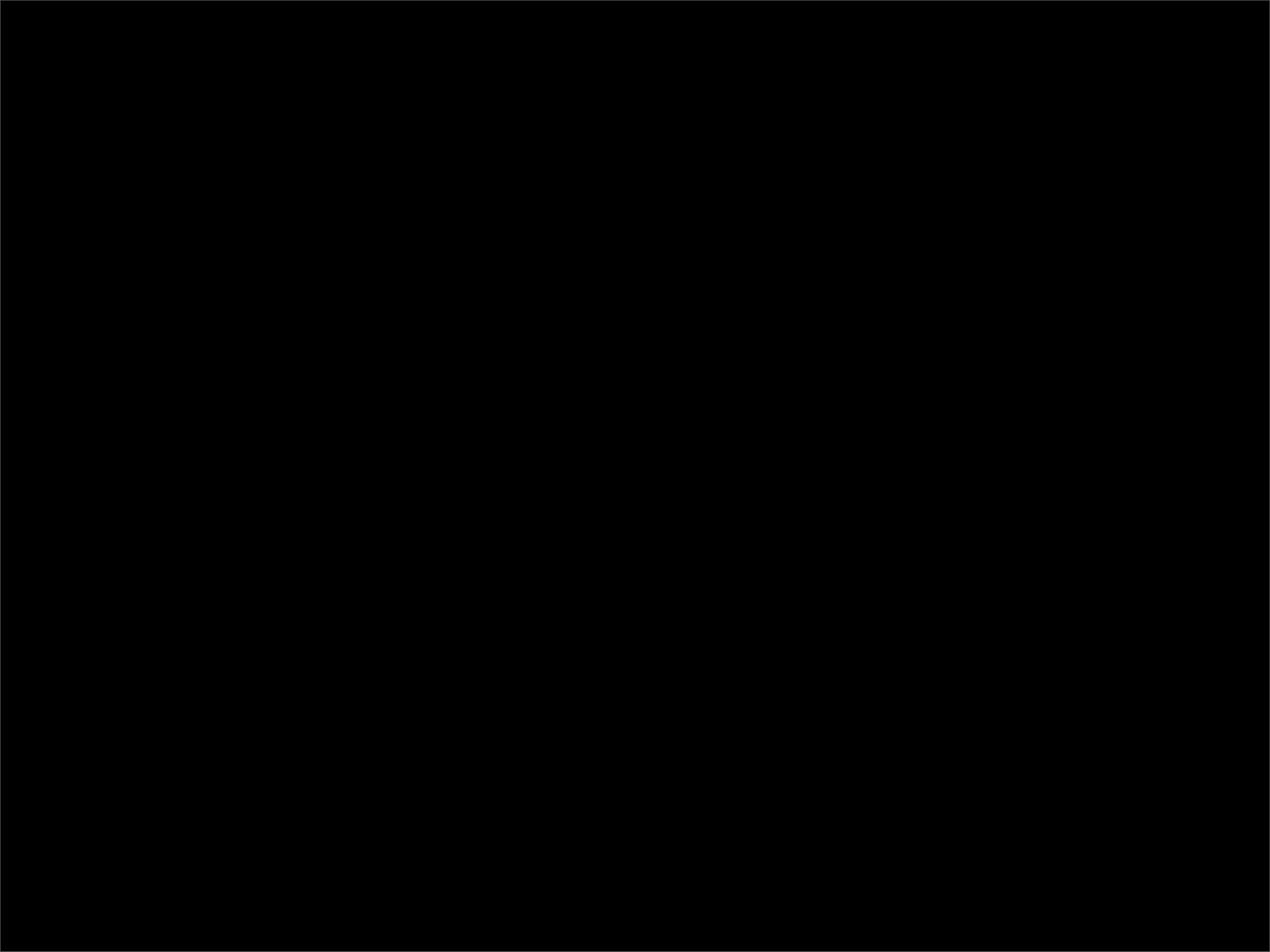
Monday, June 8, 2009



# Precession and Dakota Cosmology

# Next Steps

- Contributing Visuals to Climate Watch
- Professional Networking



# The Congo River

# The Congo River



# The Congo River

- Remote Sensing
- Ichthyology
- Hydrology
- Adventure

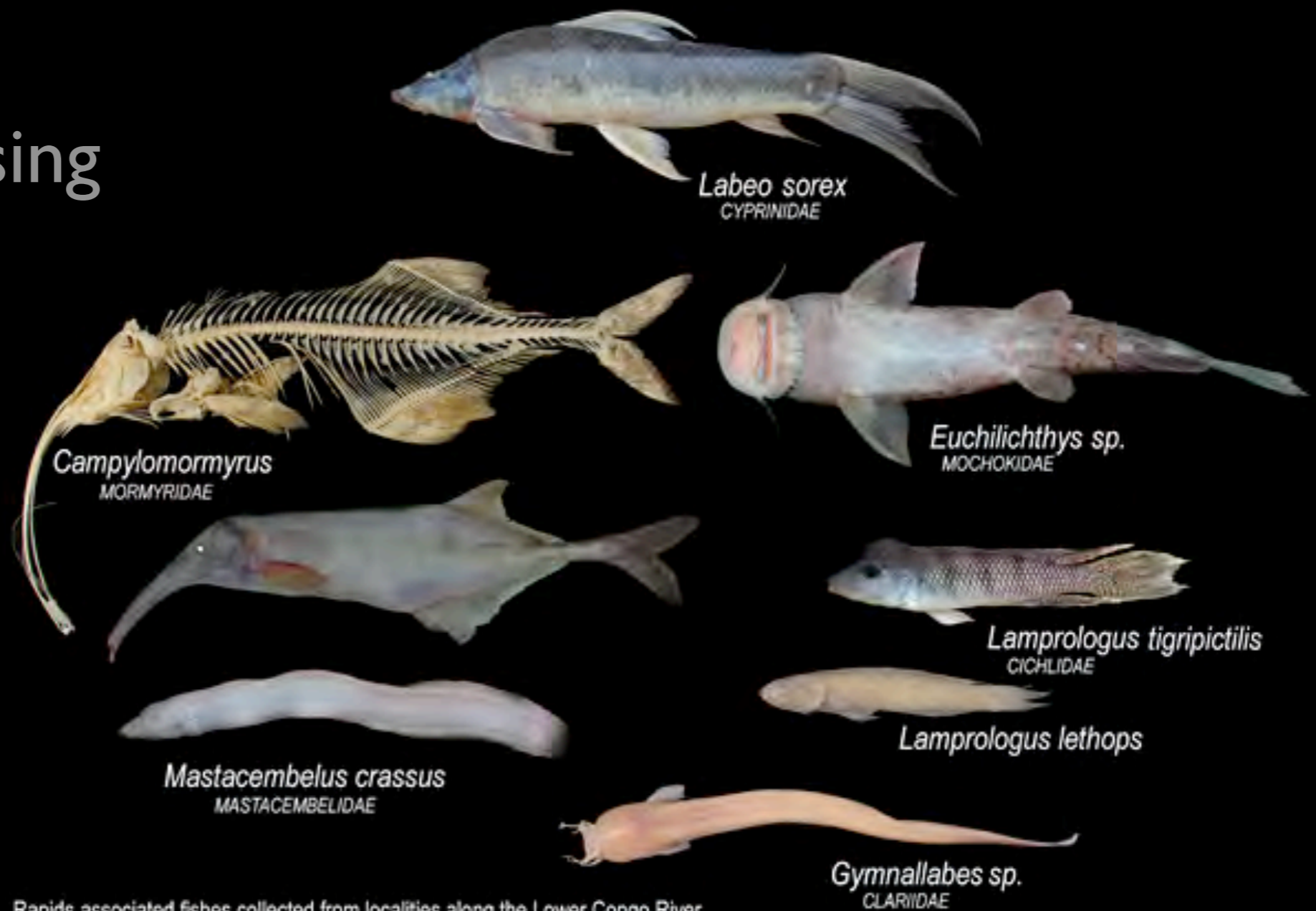
# The Congo River

- Remote Sensing
- Ichthyology
- Hydrology
- Adventure



# The Congo River

- Remote Sensing
- Ichthyology
- Hydrology
- Adventure



Rapids associated fishes collected from localities along the Lower Congo River

# The Congo River

- Remote Sensing
- Ichthyology
- Hydrology
- Adventure

# The Congo River

- Remote Sensing
- Ichthyology
- Hydrology
- Adventure



# The Congo River

- Remote Sensing
- Ichthyology
- Hydrology
- Adventure

